Serial No.: 10/589,381 Case No.: 21490YP

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (currently amended): An polypeptide immunogen comprising consisting of an amino acid sequence with up to 26 amino acid alterations from at least 85% identical to SEQ ID NO: 1, wherein said polypeptide provides protective immunity against *S. aureus* and wherein if one or more additional polypeptide regions are present said additional regions do not provide a carboxyl terminus containing amino acids 261–294 of SEQ ID NO: 7.

Claim 2 (currently amended): The polypeptide of claim 1, wherein said polypeptide consists of an amino acid sequence with up to 20 amino acid alterations from SEQ ID NO: 1. at least 94% identical to either SEQ ID NO: 1 or SEQ ID NO: 2.

Claim 3 (previously presented): The polypeptide of claim 1, wherein said polypeptide consists essentially of amino acids 3-260 of SEQ ID NO: 1 or 3-264 of SEQ ID NO: 2.

Claim 4 (original): The polypeptide of claim 3, wherein said polypeptide consists of an amino acid sequence of SEQ ID NO: 1.

Claim 5 (currently amended): An immunogen comprising —the polypeptide of claim—1, wherein said immunogen consists a polypeptide consisting of an amino acid sequence with up to 26 amino acid alterations from SEQ ID NO: 1, wherein said polypeptide provides protective immunity against *S. aureus*, of said polypeptide and one or more additional regions or moieties covalently joined to said polypeptide at the carboxyl terminus or amino terminus, wherein each region or moiety is independently selected from a region or moiety having at least one of the following properties: enhances the immune response, facilitates purification, or facilitates polypeptide stability, and said additional region or moiety is different from a sai-1 region.

Claim 6 (previously presented): A composition able to induce a protective immune response in a patient comprising an immunologically effective amount of the immunogen of claim 5 and a pharmaceutically acceptable carrier.

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Claim 7 (original): The composition of claim 6, wherein said composition further comprises an adjuvant.

Claim 8 (previously presented): A nucleic acid comprising a recombinant gene comprising a nucleotide sequence encoding the polypeptide of claim 1.

Claim 9 (original): The nucleic acid of claim 8, wherein said nucleic acid is an expression vector.

Claim 10 (previously presented): A recombinant cell comprising a recombinant gene comprising a nucleotide sequence encoding the polypeptide of claim 1.

Claim 11 (original): A method of making a *S. aureus* polypeptide that provides protective immunity comprising the steps of:

- (a) growing the recombinant cell of claim 10 under conditions wherein a polypeptide is expressed; and
  - (b) purifying said polypeptide.

Claim 12 (original): A method of inducing a protective immune response in a patient comprising the step of administering to said patient an immunologically effective amount of a polypeptide immunogen comprising an amino acid at least 85% identical to SEQ ID NO: 1.

Claim 13 (original): The method of claim 12, wherein said patient is a human.

Claim 14 (original): The method of claim 13, wherein said patient is treated prophylactically against *S. aureus* infection.

Claim 15 (currently amended): The method of claim 12, wherein said immunogen is the immunogen of claim 1 consists of an amino acid sequence with up to 26 amino acid alterations from SEQ ID NO: 1.

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Claim 16 (new): The method of claim 13, wherein said immunogen consists of an amino acid sequence with up to 20 amino acid alterations from SEQ ID NO: 1.

Claim 17 (new): The method of claim 16, wherein said immunogen is substantially purified and is at least 99% identical to SEQ ID NO: 1.

Claim 18 (new): The method of 17, wherein said immunogen consists of SEQ ID NO: 1.

Claim 19 (new): The polypeptide of claim 2, wherein said polypeptide is substantially purified.

Claim 20 (new): The polypeptide of claim 19, wherein said polypeptide is at least 99% identical to SEQ ID NO: 1